



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,726	10/07/2003	Wiebke Neumann	117163.00093	8281

21324 7590 07/18/2005

**HAHN LOESER & PARKS, LLP**

One GOJO Plaza

Suite 300

AKRON, OH 44311-1076

EXAMINER

GREENE, DANA D

ART UNIT

PAPER NUMBER

3762

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/680,726

Applicant(s)

NEUMANN ET AL.

Examiner

Dana D. Greene

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5-27-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 20 stands rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: battery and circuit.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Somdahl et al. (US 6,445,948 B1, hereinafter "Somdahl"). Somdahl is considered to disclose:

an implant housing (see col. 5, ln. 55-62, Somdahl). The disclosed sealed housing is considered to anticipate the claimed implant housing because both configurations accommodate functional components such as a battery, a circuit, telemetric means and the like;

functional component parts of the implant disposed in said housing, wherein said functional components comprise a circuit, and a battery (see col. 5, ln. 55-62 and col. 6, ln. 5-10, ln. 40-45, Somdahl). The disclosed functional components (battery and circuit)

Art Unit: 3762

are considered to anticipate the claimed battery and circuit because: (1) the battery is substantially flat which makes it easier for the implant housing to accommodate that functional component and (2) the circuit is disposed in mutually juxtaposed relationship in the implant housing;

the battery has a flat side, an underside and a peripherally extending narrow side, and the battery is arranged with its underside located on an internal base surface of the implant housing and the circuit is arranged in adjacent relationship with a flat side of the battery (see col. 6, ln. 48-59, Somdahl). The disclosed arrangement is considered to anticipate the claimed arrangement because both provide a constant ratio between the battery and circuit. In this connection, the arrangement of the battery and circuit in both Somdahl and the claimed invention affords a gain in area to which components can be fitted, in comparison with a conventional arrangement.

With reference to claims 2, 3, and 7, Somdahl is considered to disclose:

the electromedical implant wherein the circuit includes a component carrier which carries electronic components, and wherein an underside of the component carrier is adjacent to the flat side of the battery (see col. 5, ln. 55-62 and col. 6, ln. 48-54, Somdahl). The disclosed electronics module is considered to anticipate the claimed component carrier because both have an arrangement of circuits; which are embodied on conventional component carriers or modules and are fixed directly on the battery. In this connection, the carriers or modules include circuit boards maintaining a variety of electrical components designed, for example, to perform sensing and monitoring functions or routines, as well as to accumulate data related to IMD operation.

Referring to claim 4, Somdahl is considered to disclose:

the electromedical implant further comprising structures that compensate for discharge induced swelling of the battery, wherein said structures are located between the flat side of the battery and the underside of the circuit (see col. 15, ln. 23-35, Somdahl). The disclosed retainer is considered to anticipate the claimed structures because both compensate for the swelling of the battery to prevent the threat of mechanical damage to the circuit.

With reference to claims 5, 6, and 8 Somdahl is considered to disclose:

structures including free spaces between the battery and the circuit and joining elements between the battery and the circuit wherein said elements permit a relative movement of the circuit with respect to the battery (see col. 14, ln. 49-67, Somdahl). The disclosed flanges are considered to anticipate the claimed elements because both ensure proper spacing between the battery and circuit and ensure relative movement of the individual components.

With reference to claim 9, Somdahl is considered to disclose:

the electromedical implant wherein the flat side of the battery and the circuit have heightwise profiles, which are complementary to each other (see col. 14, ln. 17-30, Somdahl). The disclosed height profiles are considered to anticipate the claimed heightwise profiles because both configurations have adjacent flat sides of the battery and the circuit with a mutually matched heightwise profile, which ultimately minimizes the overall height of the two component parts stacked on top of each other.

Regarding claims 10 and 13, Somdahl is considered to disclose:

a contour that follows the heightwise profile of the battery, and the electronic components of the circuit are so arranged that an overall height of the two component parts which are stacked in mutually superposed relationship is less than about 5.9 mm (see col. 14, ln. 15-30 and col. 41, ln. 1-12, Somdahl). The disclosed length and width requirements of the housing is considered to anticipate the claimed heightwise profile because both configurations have a battery and circuit combination with a height that does not exceed .200 inches.

With reference to claim 11, Somdahl is considered to disclose:

the electromedical implant additionally comprising a mounting element, which engages the circuit (see col. 11, ln. 45-65, Somdahl). The disclosed frame is considered to anticipate the claimed mounting element because both configurations extend outwardly from the circuit board and can be introduced into the implant without a mechanical join to the battery or only at the periphery so that the mechanical stresses which occur as a consequence of the discharge-induced variation in volume cannot be diverted to the circuit.

Regarding claim 12, Somdahl is considered to disclose:

the battery and circuit stacked one upon the other (see abstract, Somdahl). The disclosed configuration is considered to anticipate the claimed battery and circuit arrangement because both minimize the overall height of the two component parts which are stacked one upon the other ultimately allowing the heightwise profile to be applied to component parts.

With reference to claims 14-16, Somdahl is considered to disclose:

the implant housing comprising a first and a second half-shell portion, and wherein the first half-shell portion is a housing shell portion of the battery (see col. 6, ln. 60-67 and col. 7, ln. 20-25, Somdahl). The disclosed walls are considered to anticipate the shell portions because both form the implant housing. In this connection, Somdahl and the claimed invention teach an implantable medical device that includes a hermetically sealed enclosure.

Referring to claims 17 and 18, Somdahl is considered to disclose:

the electromedical implant wherein the housing shell portion of the battery comprises a biocompatible material (see col. 15, ln. 36-48, Somdahl). The disclosed battery case material is considered to anticipate the claimed biocompatible material because they both include a titanium material and make it possible to forego one of the two half-shell portions of the implant housing and the resulting structural space can be used for the functional component parts.

With reference to claims 19 and 20, Somdahl is considered to disclose:

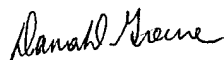
the electromedical implant wherein the circuit extends over >about 80% of the flat side of the battery (see col. 42, ln. 48-55, Somdahl). The disclosed circuit and battery placement are considered to anticipate the claimed position of the circuit and battery because both enable the better use of the structural space available in the housing.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana D. Greene whose telephone number is (571) 272-7138. The examiner can normally be reached on M-F 9-6.

Art Unit: 3762

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dana D. Greene



George Manuel

Primary Examiner